

**Friday September 20, 2024**

**7pm**

**License Testing 5:30pm**

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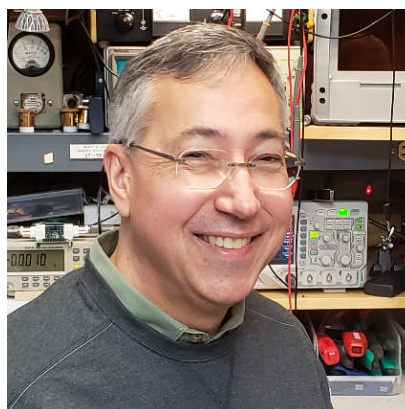
**Ham Radio Outlet 19**

**Repeaters/Nets/Calendar 20**

**THIS MONTH...**

# ADVENTURE RADIO PROTOCOL

**By George Zafiropoulos, KJ6VU**



The Adventure Radio Protocol provides a common radio frequency and tone signaling standard to make it easier for radio operators in the field to find and communicate with each other. The protocol improves on the Wilderness Protocol by adding signaling methods that allow for unattended alerting for various types of on air activities from emergencies

to POTA and SOTA spotting. More details can be found at [adventureradio.info](http://adventureradio.info)

George Zafiropoulos, KJ6VU, is active in portable operating and building repeater control systems. George is also the host of the Ham Radio Workbench Podcast focusing on technical topics of interest to the radio amateur. George tells his story when he was interviewed by Eric Guth, 4Z1UG, on the QSO Today podcast in episode 232 [www.qsotoday.com/podcasts/kj6vu](http://www.qsotoday.com/podcasts/kj6vu)



*Our in-person meeting will also be held virtually, via the Zoom video system. The meeting access ID and password will be distributed via groups.io email announcement.*



We have many accomplished and experienced club members. After all, we are an ARRL Special Service Club! The club is looking for amateur radio or communications topics that you or someone you know could present at a future club meeting.

An alternative might be several short presentations on different topics made by multiple persons.

Please direct your suggestions to our Vice President, Ed Morales, KJ6KYT at [edmorales928@gmail.com](mailto:edmorales928@gmail.com).

Your contribution is vital for the continued success of MDARC. We are eager to hear from you!

**ALL MEMBERS ARE INVITED TO JOIN THE FREE CLUB E-MAIL GROUP AT:**

<https://groups.io/g/MDARC>

\*\*\*\*\*

**Mount Diablo Amateur Radio Club W6CX**  
**P.O. Box 23222 Pleasant Hill, CA 94523**  
**(925) 288-1730 [info@mdarc.org](mailto:info@mdarc.org)**

*The Carrier* is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and provided space is available.

**President** - Larry Bradley, KK6QPE  
**Vice President** - Ed Morales, KJ6KYT  
**Secretary** - Brian Lotter, KM6NGS  
**Treasurer** - Barbara Whysong, K6WHY  
**Emergency Coordinator** - Larry Loomer, KI6LNB

**Directors At Large**  
Trevor Hall, WA6JAU      Cal Vasquez, K6VT  
Mark Fehlig WA6NGC      Mike Warren, W6MEW

**Membership Chair** - Jan Kulisek, KM6NFC  
[mdarcmembership@mdarc.org](mailto:mdarcmembership@mdarc.org)

### **PACIFICON 2024**

**Chair:** Julie Mah, WJ8MAH  
**Registration:** Jim Marchetti, KD7G  
**Treasurer:** Barbara Whysong, K6WHY  
**Secretary:** Jeff Mah, N8MAH

### **COMMITTEE CHAIRS AND COORDINATORS**

**Annual Auction** - **vacant**  
**Communications Trailer** - Mike Warren, W6MEW  
**Communications Van MDARC-1** - Jim Tittle, K6SOE  
**Digital Media** - Grant Bowman, K6CBK  
**Education & Training** - **vacant**  
**Field Day** - Larry Loomer, KI6LNB  
**Good & Welfare** - Diana Sage, KA6TZU  
**Holiday Dinner** - Misa Siemons, KJ6BUE  
**License Testing** - Larry Loomer, KI6LNB  
**Outreach** - Dick Wade, WM6G  
**Programs** - Ed Morales, KJ6KYT  
**Public Service** - Larry Loomer, KI6LNB  
**Radio Equipment Lending** - Cal Vasquez, K6VT  
**Refreshments** - Elizabeth Styles, KG6HLV  
**Scholarship** - Janice Fujii, KG6VTD  
**Technical Committee** - Jim Tittle, K6SOE  
**Volunteer Classes** - Dick Wade, WM6G  
**W6CX Repeater Trustee** - Jim Tittle, K6SOE  
**W6LGW Callsign Trustee** - Larry Loomer, KI6LNB

*The Carrier* Newsletter  
**Editor** - Matthew G. Vurek, N4DLA  
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# President's Message



HEAR YE HEAR YE!

MDARC Family,

Yes, I know that we all have been inundated with “vote” advertisements but be glad that we live in a country that allows such advertising and that allows each of us to express our choices for those who represent us at the ballot box. Be it local, state, or federal governance.

I guess you could say that the election of MDARC Board officers is about as local as it gets and these elections are just around the corner.

The first step is to create a ballot with candidates for the various positions. This is your opportunity to give it some serious thought as to who you would like to serve on the Board. In fact, there is nothing wrong with nominating yourself.

## **What are Board positions needing candidates?**

Title Name	Term
President	One year
Vice President	One year
Secretary	One year
Treasurer	One year
Emergency Coordinator	One year
Director at Large	Two years
Director at Large	Two years

## **What are the requirements to be a nominee?**

- 1) Must hold a United States Amateur Radio license
- 2) Must be a current member of MDARC
- 3) Must provide consent to the nomination

**Who may nominate?** Any MDARC member.



### **Who receives the nominations?**

Any Election Committee member can receive nominations, either verbally or by email.

### **Who are the Election Committee members?**

Name	Call Sign	Email
Larry Bradley	KK6QPE	<a href="mailto:KK6QPE@gmail.com">KK6QPE@gmail.com</a>
John Rio	N6RIO	<a href="mailto:N6RIO@yahoo.com">N6RIO@yahoo.com</a>
Benjo Sevilla	KA6BJS	<a href="mailto:KA6BJS@gmail.com">KA6BJS@gmail.com</a>
Raquel Sevilla	K1RCS	<a href="mailto:Raquel.c.sevilla@gmail.com">Raquel.c.sevilla@gmail.com</a>

### **When will nominations be closed?** October 31, 2024

**How is voting accomplished?** Shortly after 10/31/24, an electronic ballot is sent to all current (2024) members that have an email in the Membership Directory. Those who during renewing membership dues requested a printed CARRIER, will receive a printed ballot via USPS.

Note: if family members share the same email, they will get only one ballot in which case they may request printed ballots or better yet, update the Membership Directory with separate email addresses.

**When must all ballots be received?** No ballots will be received after November 13, 2024.

**When is the election count announced?** At the General Membership Meeting on Nov. 15, 2024.

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In my August President's Message, I mention about "mushing for MESH." I must admit that my interest in MESH has been off and on, largely due to whether I can actually connect to other nodes. Having a node that reaches nobody else is disappointing. When I first set up my two nodes at home I was able to connect to the MEAS through Tabletop Peak located in Briones, then it all of sudden was not reachable. Periodically I tried connecting and would get the same situation: not connecting. But a few weeks ago, I tried again and SUCCESS! So far, I am again able to connect to the MESH through Tabletop. So, there is hope for others, like me, who live on the "flatlands" of Concord to be able to set up a working node. I encourage you to do so and let us know when you do.

We are thinking about having a beginner's MESH session later in the year with a hands-on approach. Want to get started and want to know what to purchase? I suggest contacting either Mike Warren, W6MEW or John Kearney, KM6ZJT because they will have plenty of good advice.

Here is the link to the Bay Area Mesh Map: <https://sfmap.xojs.org/#8/37.8/-122.09>

*(continued on following page)*



## KK6QPE-Node-1 mesh status

Location: 37.9469596 -122.0417268  
LarryB KK6QPE

[Help](#)

[Refresh](#)

[Auto](#)

[Cloud Mesh](#)

[Quit](#)

Node Name	LAN Hostname	Service Name					
KK6QPE-Node-1							
Current Neighbors	LAN Hostname	LQ	NLQ	SNR	Quality	TxMbps	Distance Service Name
<a href="#">K6ORI-LPD-TABLETOP-OMNI</a> (rf,active)		85%	58%	18/3		3.2	5 miles
<a href="#">KK6QPE-Hap1</a> (dtd,active)		100%	100%		100%		
<a href="#">KK6QPE-Node-2</a> (dtd,active)		100%	100%		100%		
Remote Nodes	LAN Hostname	ETX				Service Name	
<a href="#">K6ORI-LPD-ALTAMESA-NSM5WEST</a>		2.16					
<a href="#">K6ORI-LPD-CUMMINGS-NSM5NORTH</a>		2.16					
<a href="#">K6ORI-LPD-ROUNDTOP-OMNI</a>		2.16					
<a href="#">K6ORI-LPD-WIEDEMANN-OMNI</a>		2.16					
<a href="#">K6ORI-ORI-ROUNDTOP-HAPTUNNEL</a> (wan)		2.16					
<a href="#">KJ6WEG-OAK-FishRanch-PBM5</a>		2.16					
<a href="#">KJ6WEG-OAK-FishRanch-SectorM5</a>		2.16					
<a href="#">NZ6J-Kregor-Peak</a>		2.16					
<a href="#">KJ6WEG-OAK-FishRanch-HAP2</a> (xlink*2)		2.26					
	KJ6WEG-FishCam					<a href="#">FishCam [camera]</a>	
	FishRanch-EdgeSwitch8					<a href="#">FishRanch-EdgeSwitch8 [switch]</a>	
	FishRanch-EdgePower					<a href="#">FishRanch-EdgePower [power]</a>	
<a href="#">KJ6WEG-OAK-ORCA-HAP2</a> (xlink*2,tun*1)		2.36					
	ORCA-EdgePower					<a href="#">ORCA-EdgePower [power]</a>	

73,

Larry Bradley, KK6QPE, President

# PROGRAMS CHAIR NEEDED

I am writing this to ask someone in the MDARC family to take on the Programs Chair in 2025.

Please note that the person who is willing to do this will not be working alone.

I will be part of the committee along with my database of speakers to assist and advise on this important role.

I hope one of you will step up to the plate and keep the general membership meetings interesting and worth attending.

Thanks for your time and I look forward to hearing back from one of you.

And I am happy to discuss this Chair with anyone interested and tell you more about it.

73, Ed Morales (he/him) KJ6KYT      GMRS Call Sign: WRKX968  
edmorales928@gmail.com

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# PUBLIC SERVICE EVENTS

September 21 MCBC Revival, Marin County

September 21 Zero BC Dipsea Hike, Marin County

September 29 Firetrails 50M running race, Oakland Hills

September 29 MADD Walk, Walnut Creek

October 5 Escape from Alcatraz, Marin County

October 19 Diablo Summit Stomp, Walnut Creek (Pacificon is on this date)

October 20 Cycle of Hope, Dublin

November 16 Lake Chabot Trail Run, Oakland Hills

Contact Larry Loomer [larylloomer@yahoo.com](mailto:larylloomer@yahoo.com) for signup information

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MADD, Mothers Against Drunk Driving, has announced a walk originating in Civic Park in Walnut Creek on September 29, 2024.

Ham radio operators will monitor the course, providing situational awareness to the walk organizers.

If you would like to support this worthwhile cause, and get some valuable emergency communication practice in this local setting, please contact Lowell Richards, KA6LER, at [ler@lerichards.com](mailto:ler@lerichards.com) to sign up for this event.

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**Tim Eisler, KO6EMS**

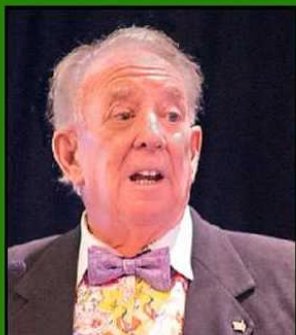
**Chuck Farnham, WD6CHC**

If you hear these new members on the air,  
please welcome them to our club.

—Jan Kulisek, KM6NFC, Membership Chair



# PACIFICON<sup>SM</sup> 2024



All Day Friday  
Antenna Seminar

Saturday Breakfast  
with Gordon West

Friday evening  
MDARC Meeting  
featuring Ed Fong



Latest  
Ham Radio  
Equipment for Sale

Ham License Testing

Get-On-The-Air  
Special Events Station



Outstanding  
Technical Forums

Sunday  
Swap Meet

Electronics  
Kit Building

Scout JOTA-JOTI &  
Merit Badge Class

## ARRL PACIFIC DIVISION HAM RADIO CONVENTION

*Experience three great  
days of activities at Pacificon!!*

*Produced by the Mt. Diablo Amateur Radio Club*

October 18, 19 & 20, 2024  
San Ramon Marriott  
2600 Bishop Drive  
San Ramon, California 94583

**GENERAL ADMISSION:  
\$35 IN ADVANCE - FOR ALL 3 DAYS!**

*Tickets at the door will cost \$45; 17 years old & under are free;  
College Students with valid student ID (25 & under): \$5*

*\*\* Some events have additional cost \*\**

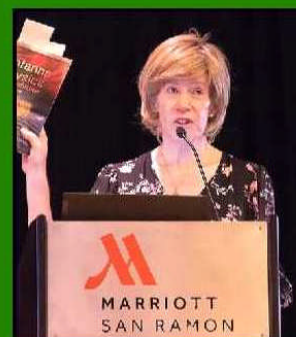
If you need hotel accommodations  
either reserve your room on-line at  
[www.pacificon.org](http://www.pacificon.org), or call Marriott Hotel Reservations  
at 925-867-9200, by Sept 25, 2024 (per availability)  
to ask for the Special Pacificon rate of \$167/night

**Go to the Pacificon Website for  
Events - Schedules - Registration  
WWW.PACIFICON.ORG**

*\*\* Events are subject to change – check website \*\**

*For current "Pacificon Rules and Policies" see website*

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Gordon West's  
Ham Instructor Academy

Saturday Banquet  
with Keynote Speaker

One Day Technician  
License Prep Class

T-Hunts!  
Saturday & Sunday



Sometime in early May 2024, ARRL's systems network was compromised by threat actors (TAs) using information they had purchased on the dark web. The TAs accessed headquarters on-site systems and most cloud-based systems. They used a wide variety of payloads affecting everything from desktops and laptops to Windows-based and Linux-based servers. Despite the wide variety of target configurations, the TAs seemed to have a payload that would host and execute encryption or deletion of network-based IT assets, as well as launch demands for a ransom payment, for every system.

This serious incident was an act of organized crime. The highly coordinated and executed attack took place during the early morning hours of May 15. That morning, as staff arrived, it was immediately apparent that ARRL had become the victim of an extensive and sophisticated ransomware attack. The FBI categorized the attack as "unique" as they had not seen this level of sophistication among the many other attacks, they have experience with. Within 3 hours a crisis management team had been constructed of ARRL management, an outside vendor with extensive resources and experience in the ransomware recovery space, attorneys experienced with managing the legal aspects of the attack including interfacing with the authorities, and our insurance carrier. The authorities were contacted immediately as was the ARRL President.

The ransom demands by the TAs, in exchange for access to their decryption tools, were exorbitant. It was clear they didn't know, and didn't care, that they had attacked a small 501(c)(3) organization with limited resources. Their ransom demands were dramatically weakened by the fact that they did not have access to any compromising data. It was also clear that they believed ARRL had extensive insurance coverage that would cover a multi-million-dollar ransom payment. After days of tense negotiation and brinkmanship, **ARRL agreed to pay a \$1 million ransom.** That payment, along with the cost of restoration, has been largely covered by our insurance policy.

From the start of the incident, the ARRL board met weekly using a continuing special board meeting for full progress reports and to offer assistance. In the first few meetings there were significant details to cover, and the board was thoughtfully engaged, asked important questions, and was fully supportive of the team at HQ to keep the restoration efforts moving. Member updates were posted to a single page on the website and were posted across the internet in many forums and groups. ARRL worked closely with professionals deeply experienced in ransomware matters on every post. It is important to understand that the TAs had ARRL under a magnifying glass while we were negotiating. Based on the expert advice we were being given, we could not publicly communicate anything informative, useful, or potentially antagonistic to the TAs during this time frame.

Today, most systems have been restored or are waiting for interfaces to come back online to interconnect them. While we have been in restoration mode, we have also been working to simplify the infrastructure to the extent possible. We anticipate that it may take another month or two to complete restoration under the new infrastructure guidelines and new standards.

Most ARRL member benefits remained operational during the attack. One that wasn't was Logbook of The World (LoTW), which is one of our most popular member benefits. LoTW data was not impacted by the attack and once the environment was ready to again permit public access to ARRL network-based servers, we returned LoTW into service. The fact that LoTW took less than 4 days to get through a backlog that at times exceeded over 60,000 logs was outstanding.

The board at the ARRL Second Board Meeting in July voted to approve a new committee, the Information Technology Advisory Committee. This will be comprised of ARRL staff, board members with demonstrated experience in IT, and additional members from the IT industry who are currently employed as subject matter experts in a few areas. They will help analyze and advise on future steps to take with ARRL IT within the financial means available to the organization.

We thank you for your patience as we navigated our way through this. The emails of moral support and offers of IT expertise were well received by the team. Although we are not entirely out of the woods yet and are still working to restore minor servers that serve internal needs (such as various email services like bulk mail and some internal reflectors), we are happy with the progress that has been made and for the incredible dedication of staff and consultants who continue to work together to bring this incident to a successful conclusion.



# MDARC Board of Directors Meeting August 5, 2024

Held at Zoom online

**1. Call to Order:** The meeting was called to order at 7:00 pm by Larry Bradley, KK6QPE after it was determined that there was a quorum for conducting Club business.

**2. Roll Call:** Attendees via Zoom screen shot: **Officers:** Larry Bradley KK6QPE, President; Ed Morales KJ6KYT, Vice President; Brian Lotter KM6NGS, Secretary; Barbara Whysong K6WHY, Treasurer; Larry Loomer KI6LNB, Emergency Coordinator; Mike Warren W6MEW, Director at Large; Trevor Hall WA6JAU, Director at Large; Mark Fehlig WA6NGC, Director at Large; Cal Vasquez K6VT, Director at Large.

**Committee Chairs/Coordinator:** Grant Bowman K6CBK, Digital Media Chair; Jim Tittle K6SOE, Rocky Ridge Repeater (aka Tech). **Guests:** Mike Patterson N6JGA, Dave WA6UHA.

**3. Approval of Minutes from Last Meeting:** Ed KJ6KYT, seconded by Barbara K6WHY, proposed a motion to approve the minutes. The minutes of the July 1<sup>st</sup> Board of Directors Meeting were unanimously approved.

**4. Adopt Tonight's Agenda:** Tonight's agenda was adopted.

## 5. Officer reports:

- a. President Larry Bradley KK6QPE – Had no report.
- b. Vice-President Ed Morales KJ6KYT – Had no report.
- c. Secretary Brian Lotter KM6NGS – Had no report.
- d. Treasurer Barbara Whysong K6WHY – Barbara showed her report dated July 31<sup>st</sup> 2024.

### Balance Sheet July 31, 2024

#### ASSETS

##### Current Assets

##### Checking/Savings

Equipment Self-Ins Fund 63,790.01

MDARC Savings 28,431.65

MDARC Checking 48,322.55

PACIFICON 15,032.14

Total Checking & Savings 155,576.35

Total Current Assets 155,576.35

**TOTAL ASSETS 155,576.35**

**LIABILITIES 0.00**

**NET ASSETS 155,576.35**

**Increase/Decrease from prev month 672.00**

Barbara elaborated on the Statement of Activities which shows the movement of money into and out of the various categories of the MDARC and PACIFICON accounts. Trevor WA6JAU asked Barbara to find out, from our accountants, the maximum amount of money we can have in our accounts and still retain our 501c3 status. In response to a previous question about what it costs to use Stripe, PayPal and WePay, Barbara showed a table which listed gross payments, Fees charged by the vendors and net receipts to MDARC. She also showed bar charts which compared PACIFICON Vendor and Attendee registrations by year. Barbara added that, due to family and personal issues, she won't be returning as Treasurer next year. Benjo KA6BJS asked for clarification about payments required to take a license test at PACIFICON. After some discussion, it was stated that you pay the usual test fee of \$15 regardless of whether you want to do anything else at PACIFICON or not. If you want to do anything else, like the Ham Cram or visit the Vendor Halls, you also need to register for PACIFICON.

**Emergency Coordinator Report:** Larry KI6LNB had no report.

## 7. Directors at large reports:

Mike Warren W6MEW – Had no director's report. Trevor Hall WA6JAU – Had no director's report. Mark Fehlig WA6NGC – Had no director's report. Cal Vasquez K6VT – Had no director's report.

## **8. Committee Reports:**

- a. Auction: Vacant. No report was expected.
- b. Communications Trailer: There was no report.
- c. Digital Media: Grant K6CBK reported that, the website has been updated in a few small places, there is a new web page, under Technical Committee, related to one of the repeaters. He has received data, from the vendor chair, for the PACIFICON map and will work on that soon.
- f. Education and Training: Larry KK6QPE reported that the second Technician class for 2024 is moving along with around 18 attendees, mostly on Zoom, in each session. There will be license testing on August 20<sup>th</sup>.
- g. Election Committee: No report was expected.
- h. Field Day: Larry KI6LNB reported that all activity related to field day has been completed.
- i. Holiday Banquet: No report was expected.
- j. License Testing: Larry KI6LNB reported that there will be license testing on August 16 at the General meeting. It will also happen on the August 20<sup>th</sup> for the Technician course.
- k. Membership: Jan KM6NFC sent his report via email.
- l. Mesh Committee: There was no report.
- m. Outreach: Dick Wade WM6G was not present.
- n. PACIFICON: Barbara K6WHY expressed concern that the PACIFICON website needs to be updated because it doesn't look like there is anything going on. It was noted that Grant is waiting for information to do an update and that he will get it soon. Barbara added that there is a hotel payment of \$9,000 due later this month. This will be paid from the PACIFICON account so the balance will go down to \$6,000. Cal K6VT mentioned that he has contacted potential donors and will provide them with paperwork for donations.
- o. Programs: Ed KJ6KYT stated that he had sent an email out to Larry Bradley and Grant with a cc to the whole club about setting up a date for a Zoom call. Once he has commitments from Larry and Grant, he will announce the meeting to the whole club in an effort to get more members to participate.
- p. Public Service: Larry KI6LNB announced that he will send a full list of activities on groups.io. and noted that the Marin activities will be included in the list. He added that the Marin activities are very well organized and recommended that participation in them would be a good learning experience.
- q. Radio Lending Library: There was no report.
- r. Rocky Ridge Repeater (Tech): Larry KK6QPE stated that Jim Tittle K6SOE had sent an email saying that he doesn't have an RFinder account so he can't see if the changes that he submitted have been properly recorded. Larry stated that he no longer has a RFinder account so he asked for any member, who does have an Account, to check it for us. It was noted that the repeater had been down for a few hours due to a power failure. The repeater came back online automatically, and Trevor WA6JAU stated that he did not need to do anything to bring it back up again. Grant noted that he is working on a reporting system that sends out alerts when devices go down or come up again. Since there are false positives and negatives, it is best to send out alerts manually at this time. Trevor added that the Tech. group is working on a better UPS with bigger batteries for the Repeater, but doubts that the system will be capable of covering a full ten-hour period, which was the amount of downtime of the last failure. In response to a question from Benjo KA6BJS, Trevor stated that there is presently no mechanism to use the low battery warning from the UPS to report an impending power shut down and hence an impending Repeater shutdown.
- s. Scholarship: No report was expected.

## **9. Future Meetings:**

General Meeting: 08/16/2024 will be a hybrid, in-person and online. Board Meeting 09/02/2024 on Zoom only.

## **10. Unfinished Business:**

10.1 Status report on revising Membership database for processing and tracking payments, new payment gateway status: Barbara is waiting for information from Jan KM6NFC and there was no further to report.

10.2 Pacificon Funds Transfer Policy: Barbara suggested that this item be closed since it has been decided that all financial activities will be handled in the MDARC account.

10.3 Financial Audit: Barbara stated that she intends to work on it during this month

*(continued on following page)*

10.4 Asset List: Barbara K6WHY reported that she had consulted with our accountant and found that it is only necessary to keep a list of assets that cost more than \$2,500 and that they should be depreciated by 20% of the initial cost, each year, over 5 years. We currently have no assets that meet these criteria and since we are self-insured, we don't need to provide a list of assets to an insurance company. According to Trevor WA6JAU, we have a total of 15 projectors that are used at PACIFICON, two of them are also used for our Zoom meetings and classes. Trevor will make a list of projectors, with serial numbers, when he retrieves them from storage for the coming PACIFICON. We also have an electronic whiteboard which is currently at the Clayton Valley Presbyterian Church where we conduct our classes but it is not clear if it is still useable.

10.5 "\$3500 anonymous donation to MDARC: What to use it for, etc. Discuss proposals in terms of Merit, Scope and Cost. From Mark; Fund all MDARC VE and FCC application/retest fees for all new and upgraded amateur radio licenses administered by the MDARC VEs. After much discussion, Mark proposed a motion that only the \$15 Technician Test, with one free retest, will be funded by MDARC up to a total of \$1,000. The board voted 3 to 2 in favor of this motion. Fund MDARC initial membership fees for all successful licenses. Past History not very supported... No cost to MDARC other than lost dues revenue. Donation funds uninvolved. First year only. Larry KK6QPE said that since this wouldn't involve any expenditure by MDARC, it should not be discussed under expenditure for this donation. Advertise aggressively for membership growth. This was not discussed further. From Barbara; Purchase an iPad or other tablet to be used with Square or Stripe point-of-sale devices. Square is used at Pacificon registration but could also be used at meetings or other events to process donations and memberships. Stripe is currently only online, but in the future, it may be used for point-of-sale (replacing Square). This is on hold because Barbara stated that she now has all of the club's "Square" devices and will test them. She will also consult with the Jim Marchetti to see if he needs a tablet. Equipment needed to support a MDARC booth for a proposed Community Engagement Committee: a lightweight 10'x10' popup, sandbag weights, folding table; create displays for Ham Radio and MDARC; create MDARC full color brochure; pay for registration fees at events. Estimated cost: \$1200

a) Community Engagement Committee purpose: for the purpose of developing a booth for MDARC in order to inform and engage the community in Ham Radio and MDARC.

b) Suggestions for events: art & wine festivals, high school events, college science classes, farmer's markets, swim meets, etc.

This was discussed during the July Board meeting where it was noted that we already have this equipment which is stored in the trailer and that a new full color brochure will be developed. Since the actual cost is not available yet, Larry Bradley added an estimate of \$400.

Accounting software package: This software to replace MDARC's current use of Excel worksheets, which are considered non-compliant for good accounting practice. Consider purchase of FastFund software as provided by Araize [[Araize - Total Software Solution for Nonprofits](#)]. Estimated cost: \$700 per year. This was discussed again and Larry KK6QPE stated that this should be a normal club expenditure and not fall under the discussions related to this donation. It was decided that Barbara will continue to do research to find the best software for our needs. Barbara volunteered to help the new treasurer to learn the new software, for a short time.

10.6 Emergency Preparedness Fair on 09/05/2024, 4pm to 7pm, Todos Santos Plaza, Concord: While Larry KK6QPE reported, in the last Board Meeting, that he had made an application, for a booth, to Concord, he has not heard back from them yet. He has subsequently sent an email to the manager.

10.7 Need presenters for the MDARC Emergency Communication and Auxiliary Amateur Radio presentations: There was no further discussion on this issue.

10.8 **Amend** MDARC bylaws: Section 3. Nominations;  
Section 3. NOMINATIONS

Any member in good standing with a United States Amateur Radio license may be proposed for nomination. Nominations may be made via email to a member of the Election Committee and from the floor at the September and October meetings. At both of these meetings, a member of the Election Committee will announce the current nominees. Nominations will be accepted up to and including October 31st and closed afterwards. **Once nominations are closed, no other nominees will be added to the ballot and write-in votes will not be accepted.** The names of those nominated prior to the October publication deadline shall be published in the October Club newsletter; those nominated up to and including October 31st will be published in the November club newsletter. Larry KK6QPE has submitted this for publication in the July and August editions of *The Carrier* and the general membership attendees will vote on it during the August General Meeting. Only club members are eligible to vote.

(continued on following page)



10.9 The 2024 ARRL Repeater Directory omitted all the MDARC analog FM repeaters as well as the DATV repeater. Only the MDARC digital repeaters were listed. There was no further discussion on this point.

10.10 Merging Pacificon accounts and budget under MDARC: Barbara stated that, in order to get this done, she needs to meet with Mike Patterson to change the accounts on Google. She also needs to change the accounts on Constant Contact.

**11. New Business:**

11.1 Election Committee formation  
ARTICLE VI - ELECTION COMMITTEE  
Section 1. COMMITTEE MEMBERS

The Election Committee shall consist of at least three members appointed by the President no later than the August General Membership meeting. Two Election Committee members from prior years have declined to take on this role for this year. Larry KK6QPE can still serve as Committee Chair but we definitely need two others on the committee. Benjo KA6BJS has agreed to take on this role so Larry KK6QPE needs to find a second volunteer.

Section 2. DUTIES

It shall be the duties of the Election Committee to procure candidates for each office, qualify nominated members as to membership and willingness to accept the nomination, ensure ballots are properly and timely provided to all members in good standing, receive and tabulate ballots, and announce the results of the election at the November meeting.

**12. Good of the order:**

Nothing was heard.

**13. Adjournment:**

Trevor WA6JAU, seconded by Barbara, proposed a motion to adjourn. Meeting Adjourned at 9:07 pm.

Respectfully submitted by:  
Brian Lotter KM6NGS  
Secretary, August 23, 2024.  
These meeting minutes were signed digitally due to the digital meeting.

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# MDARC General Meeting Minutes July 19, 2024

Held as hybrid Zoom and in-person meeting

**1. Call to Order:** The meeting was called to order at 7:00 pm by MDARC president Larry Bradley KK6QPE.

- a. Welcome to all: Larry KK6QPE welcomed all attendees.
- b. Pledge of Allegiance: This was made by attendees.
- c. Safety, Exits, Rest Rooms: Larry KK6QPE indicated the positions of the emergency exits and restrooms.
- d. Acknowledge new members: No new members were present.
- e. Acknowledge visitors: There were no visitors.

**2. Approval of Minutes from the Last Meeting:** The minutes were approved without objection.

## **3. Officer Reports:**

- a. President: Larry Bradley KK6QPE had no report.
- b. Vice President: Ed Morales KJ6KYT was not present.
- c. Secretary: Brian KM6NGS had no report.
- d. Treasurer: Barbara Whysong K6WHY displayed her report as follows: Barbara read out the numbers from her report and added that the Board has decided to merge the PACIFICON checking account into the MDARC checking account. She also noted that all of the money coming in for PACIFICON, is going into the MDARC account.
- e. Emergency Coordinator: There was no report.

## **4. Directors at Large**

Directors at Large: Mike W6MEW, Trevor WA6JAU and Mark Fehlig WA6NGC had nothing to report and Cal K6VT was absent. Mark asked if anything had come of his proposal for spending the \$3500 donation to MDARC. Larry KK6QPE told him that there were 3 other good proposals and that they were all still under consideration.

## **5. Committee Reports – Standing:**

- a. Auction: Report not scheduled or unavailable.
- b. Outreach Coordinator: Report not scheduled or unavailable.
- c. Technical: There was no report.
- d. Digital Media: Grant Bowman, K6CBK reported that he had done updates to the website but nothing major.
- e. Education and Training: Larry KK6QPE stated that they have completed the fourth session of an eight session Technician course. Between 18 and twenty students are attending. Either in-person or on Zoom.
- f. Pacificon: There was no report.
- g. Membership: Jan KM6NFC, reported that there are 276 paying members and a total of 332, including family members. 69 who haven't renewed yet. One member renewed in the past month. Jan will send out reminders via email and postcard.
- h. Public Service: Larry KK6QPE suggested that people should go to the Public Service section of the MDARC website to see upcoming events.
- i. Vehicle Committee [MDARC-1) Report not scheduled or unavailable.
- j. License Testing: Jim Turnbull reported that 9 people passed the Technician test, 2 people passed the General test and one person, who is an Amateur Extra, took the Technician test again. 12 out of 13 passed their test.
- k. Trailer Committee: Report not scheduled or unavailable.
- l. Field Day: There was no report.
- m. Holiday Banquet: Report not scheduled or unavailable.
- n. Election Committee: Report not scheduled or unavailable.
- o. Program Committee: There was no report.

**6. Unfinished Business:** None

**7. Adjourn Business Meeting:** The meeting was adjourned at 7:20 pm.

Respectfully submitted by  
Brian Lotter, KM6NGS  
Secretary, on August 11, 2024.

# ESTATE SALE

**Astron VS-35M 2 to 15 volts 35 amp power supply \$160**

**Astron RS-35M 35 amp power supply \$180**

**Kenwood IF-232C computer interface \$20**

**Kenwood TS-2000 HF/VHF/UHF Transceiver \$800**

**Kenwood SP-23 external speaker for TS-450 \$100**

**Yaesu G-800DXA rotator controller only (no rotator) \$80**

**Diamond MX-72H HF-VHF/UHF Duplexer \$30**

**Vibroplex Keyer \$90**

**McElroy semi-automatic telegraph key \$150**

**Reasonable offers for any of the above considered. Contact:**

**Kim Leong, N6YJ, 925-575-1941 or [n6yj.qth@gmail.com](mailto:n6yj.qth@gmail.com)**

## **Low-Cost Receivers for Digital Amateur Television Reception Available For Sale from Club Member KA3VDT**

**These are DVB-S2 receivers pre-programmed for our club's 1.2 GHz W6CX DATV repeater frequencies**

**Connect a 1.2 GHZ directional antenna, aim it at Mount Diablo's North Peak and watch the over the air repeater signal on your video monitor**

**Please contact Will Roberts at [ka3vdt@gmail.com](mailto:ka3vdt@gmail.com) or visit**

**<http://laser66.com/ham/>**

**To purchase a DATV transmitter, contact Fred Coe, WB6ASU, at [wb6asu@icloud.com](mailto:wb6asu@icloud.com)**



**SATURDAY, October 5, 2024 - BENICIA, CA**



# AMATEUR RADIO LICENSE CLASS

***Average 90% Pass Rate***

**Study Session followed by Exam**



**When: Saturday, October 5, 2024**

**8:30 AM - 5:00 PM**

**Test only: 1:00 PM \$14**

**Where: Benicia Senior Center  
1201 East 2nd Street, Benicia**

**What: Technician Class (beginner's level)  
General Class Upgrade *(for licensed Techs)***

**Fees: \$35.00 *includes exam fee - FCC \$35 Fee (not included)***

**Register: [beniciaarc.com/hamclass](http://beniciaarc.com/hamclass)**

**Questions: [HamRadioClass@BeniciaARC.com](mailto:HamRadioClass@BeniciaARC.com)  
or 707-742-3227 Voicemail or Text**



**Class size is limited and fills quickly**

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No prep or prior study required**

***Reserve Your Space - Become a Ham in One Day!***

**Prospective Hams: Plan on attending local Get-On-The-Air Classes (TBA)  
after passing their test to become familiar with Amateur Radio operations**



***Can't make the  
upcoming class?***

***Capture the QR code  
for future sessions***

**Element 4 (Extra class)  
You need only pay the  
test fee of \$14. We do  
not provide study  
materials for Element 4.**



Character illustration courtesy ICOM USA

# RENO Ham Swap

**Saturday, September 14, 2024**

**Cabela's Reno - East Parking Lot**

**8650 Boomtown Garson Rd, Verdi, NV (west of Reno)**

**Seller Setup @ 7:00AM**

**\$10.00 Per Space**

**Open to Public @ 8:00AM**

**Free to Browse and Buy**

**Cabelas Opens @ 9:00AM**

**Shop the Famous Cabela's**

**Raffle Drawing @ 10:00AM**

**HT Radios and More**



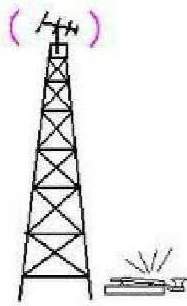
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# Eighteenth Annual Sacramento Valley Hamfest!



*Hi-Tech*

**Saturday, Sept 21, 2024**



*Liquidators*

**0700 to 1200 Hours**

**Presented by Western Placer Amateur Radio Club**

**65 McBean Park Dr. (Hwy. 193) Lincoln CA**



**Bandstand Parking Lot**

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## FTDX10 | HF/50MHz 100 W SDR Transceiver

- Narrow Band and Direct Sampling SDR • Down Conversion, 9MHz IF Roofing Filters Produce Excellent Shape Factor • 5" Full-Color Touch Panel w/3D Spectrum Stream • High Speed Auto Antenna Tuner • Microphone Amplifier w/3-Stage Parametric Equalizer • Remote Operation w/optional LAN Unit (SCU-LAN10)



## FT-991A | HF/VHF/UHF All Mode Transceiver

- Real-time Spectrum Scope with Automatic Scope Control • Multi-color waterfall display • State of the art 32-bit Digital Signal Processing System • 3kHz Roofing Filter for enhanced performance • 3.5 Inch Full Color TFT USB Capable • Internal Automatic Antenna Tuner • High Accuracy TCXO



## FTDX101D | HF + 6M Transceiver

- Narrow Band SDR & Direct Sampling SDR • Crystal Roofing Filters Phenomenal Multi-Signal Receiving Characteristics • Unparalleled -70dB Maximum Attenuation VC-Tune • 15 Separate (HAM 10 + GEN 5) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream



## FT-710 Aess | HF/50MHz 100W SDR Transceiver

- Unmatched SDR Receiving Performance • Band Pass Filters Dedicated for the Amateur Bands • High Res 4.3-inch TFT Color Touch Display • AESS: Acoustic Enhanced Speaker System with SP-40 For High-Fidelity Audio • Built-in High Speed Auto Antenna Tuner



## FT-891 | HF+50 MHz All Mode Mobile Transceiver

- Stable 100 Watt Output • 32-Bit IF DSP • Large Dot Matrix LCD Display with Quick Spectrum Scope • USB Port Allows Connection to a PC with a Single Cable • CAT Control, PTT/RTTY Control



## FTM-300DR | C4FM/FM 144/430MHz Dual Band

- 50W Output Power • Real Dual Band Operation • Full Color TFT Display • Band Scope • Built-in Bluetooth • WIRELESS-X Portable Digital Mode/Fixed Mode with HRI-200



## FT-2980R | Heavy-Duty 80W 2M FM Transceiver

- 80 watts of RF power • Large 6 digit backlit LCD display for excellent visibility • 200 memory channels for serious users



## FTM-200DR | C4FM/FM 144/430MHz Dual Band

- 1200/9600bps APRS® Data Communications • 2" High-Res Full-Color TFT Display • High-Speed Band Scope • Advanced C4FM Digital Mode • Voice Recording Function for TX/RX



## FTM-500DR | C4FM/FM 144/430MHz Dual Band Xcvr

- Front Firing Acoustically Enhanced Speaker System • True Dual Band Operation, C4FM/C4FM Digital D-D Dual Receive • 2.4" High-Resolution Full-Color Touch Panel Display • Built-in High Precision GPS Receiver • Wireless Operation Capability with Optional Bluetooth® Headset

## FT-70DR C4FM/FM 144/430MHz Xcvr

- System Fusion Compatible • Large Front Speaker delivers 700 mW of Loud Audio Output • Automatic Mode Select detects C4FM or Fm Analog and Switches Accordingly • Huge 1,105 Channel Memory Capacity • External DC Jack for DC Supply and Battery Charging



## FT-5DR C4FM/FM 144/430 MHz Dual Band

- High-Res Full-Color Touch Screen TFT LCD Display • Easy Hands-Free Operation w/Built-In Bluetooth® Unit • Built-In High Precision GPS Antenna • 1200/9600bps APRS Data Communications • Supports Simultaneous C4FM Digital • Micro SD Card Slot



## FT-65R | 144/430 MHz Transceiver

- Compact Commercial Grade Rugged Design • Large Front Speaker Delivers 1W of Powerful Clear Audio • 5 Watts of Reliable RF Power Within a compact Body • 3.5-Hour Rapid Charger Included • Large White LED Flashlight, Alarm and Quick Home Channel Access



## FTM-6000R | 50W VHF/UHF Mobile Transceiver

- All New User Operating Interface-E20-III (Easy to Operate-III) • Robust Speaker Delivers 3W of Clear, Crisp Receive Audio • Detachable Front Panel Can Be Mounted in Multiple Positions • Supports Optional Bluetooth® Wireless Operation Using the SSM-BT10 or a Commercially Available Bluetooth® Headset

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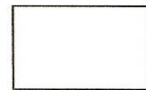
## The Carrier

Newsletter of the Mt. Diablo Amateur Radio Club

P.O. Box 23222

Pleasant Hill, CA 94523

[www.mdarc.org](http://www.mdarc.org)



## FIRST CLASS

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### W6CX Nets

M-F 5:42 am Morning Muster 147.060+ 224.780- 441.325+

M-F 6:10am Commuter Net 147.060+ 224.780- 441.325+

Monday 8:00 pm SATERN Net 147.060+

Tuesday 7:30 pm Fat City 10 meter USB/CW Net 28.420 MHz

Tuesday 8:00pm Digital Practice Net 147.060+ 224.78- 441.325+

Wednesday 7:00 pm SKYWARN Net 147.060+

Wednesday 8:00pm Delta Amateur Radio Club Net 147.060+

Thursday 7:30 pm MDARC Club Net 147.060+

Thursday 8:00 pm Digital Amateur Television Net 147.060+

### Club Voice Repeaters

147.060 MHz + / PL 100Hz

224.780 MHz - / PL 77Hz 441.325 MHz + / PL 100Hz

EchoLink: W6CX-R /133896, IRLP: 3057

DMR Repeater 144.925 offset plus 2.5 MHz color code 1

**D-STAR** 145.000 offset plus 2.5 MHz

<https://w6cx.dstargateway.org/>

**DATV Internet Stream:** <http://w6cxatv.mdarc.org>

**YouTube Channel:** [Media MDARC](#)

### Contra Costa County Emergency Communications Nets Every Thursday

6:30 pm HF Countywide 3.893 MHz LSB

6:45 pm West County 145.110-- (82.5 PL)

7:00 pm Central County 145.680 Simplex

7:00 pm East County 146.535 Simplex

7:00 pm South County 147.480 Simplex

7:20 pm Countywide 145.490-- (107.2 PL)

or 147.735-- (107.2 PL)

or 145.410-- (107.2 PL)

### Concord Auxiliary Radio Emergency Service (CARES)

Wednesday 8:00pm 147.405 Simplex

### Digital Amateur Television Repeater

Digital ATV Output: 1244.500

Digital ATV Inputs: 1292.500, 1273.0, 917.0, 430.0

Analog ATV Input: 1270.000 FM (PL 192.8)

## September and October 2024 Club Calendar

Friday September 20, 2024	7:00pm	MDARC General Meeting - Our Saviors Lutheran Church, 1035 Carol Lane, Lafayette
Saturday October 5, 2024	8:00am	MDARC Technical Committee Meeting - VIA VIDEO CONFERENCE
Monday October 7, 2024	6:30pm	MDARC Board of Directors Meeting - VIA VIDEO CONFERENCE
Friday October 18, 2024	7:00pm	MDARC General Meeting - <b>AT PACIFICON !</b> Marriott Hotel, San Ramon